

REMARKS

By this Amendment, claims 2-3, 5-6, 10-11, 13-20, 22-25, 29-32, 35, 38-39 and 43-45 are cancelled, and claims 46-71 are added. Thus, claims 46-71 are active in the application. Reexamination and reconsideration of the application are respectfully requested.

In item 2 on page 4 of the Office Action, claims 2-3, 11, 13-19, 22-23, 30-32 and 44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rangan et al. (U.S. 6,493,872) in view of Alexander et al. (U.S. 6,177,931).

This rejection is believed to be moot in view of the cancellation of claims 2-3, 5-6, 10-11, 13-20, 22-25, 29-32, 35, 38-39 and 43-45. Furthermore, the Applicants respectfully submit that this rejection is inapplicable to new claims 46-71 for the following reasons.

The present invention provides a novel content providing system that allows for a video content, such as a digital television program, to be broadcast nationally over a satellite broadcasting system, for example, and for a commercial message (CM), which is to be interrelated to the video content, to be inserted into the nationally broadcast digital television broadcast and played on the television of a subscriber of the satellite broadcasting system.

Prior to the advent of nationwide satellite television broadcasting, broadcast programs may have originated from a national key station, but the broadcast programs were first distributed to regional broadcasters which in turn provided the broadcast programs to customers in the regional station's region. Furthermore, commercial messages of local interest could then be inserted into the broadcast program of the regional broadcasters. For instance, a Washington, DC restaurant could pay for commercial messages to be inserted into a broadcast program that was broadcast from a Washington, DC area regional broadcaster to subscribers in the Washington, DC area.

However, with the increasing popularity of and demand for national satellite television broadcasting, video content programs are being broadcast nationwide from a national key station via a national satellite broadcasting network. Such national satellite television broadcasting obviates the need for regional broadcasters to broadcast the program data over a particular region. While satellite television subscribers are now able to retrieve national broadcasting, regional broadcasters are preempted from inserting localized commercial messages into the nationally broadcast video content programs. Accordingly, localized commercial messages

cannot be inserted into the nationally broadcast video content programs unless an individual or entity is willing to pay for his or her advertisements to be broadcast over the entire nation.

The present invention solves the above problems by providing a content providing system, in addition to a terminal and a server which are used in the content providing system, in which a video content to be broadcast through a digital broadcasting network and a commercial message, which is stored on a network, are interrelated with each other and made available to subscribers of the digital broadcasting network.

In particular, the present invention provides that a video content which is embedded with tag information corresponding to the video content is received by a terminal, and a commercial message is determined to be outputted based on the tag information and location information indicating a location of the terminal. The present invention provides that the tag information is used to select a plurality of commercial messages and indicates a correspondence between the video content and the plurality of commercial messages, which are each assigned a URL.

The present invention also provides that the terminal includes a URL specifying unit which is operable to specify a URL assigned to at least one of the commercial messages based on location information indicating an area where the terminal is located and the tag information, and a fetch unit which is operable to fetch the determined commercial message by using the specified URL. The terminal storing commercial message specifying information also outputs at least one of the commercial messages that correspond to the video content and the location of the terminal.

The inventions of independent new claims 46 and 63 recite these features of the present invention.

Alexander et al. discloses a system and method for improving electronic program guides (EPG). In particular, Alexander et al. discloses specifying a program that is selected by a user by using time information (real time clock) or a tuner setting, obtaining a category label of the specified program by using EPG information that is transmitted independently of the program, and obtaining and displaying an advertising message in accordance with the obtained category label (see Column 33, lines 44-65). Alexander et al. also discloses that an advertising message may be selected based on the zip code of a viewer, and that an advertisement may be downloaded via an Internet/WWW connection that is established by the EPG (see Column 32, lines 35-54).

The concept of using a zip code in Alexander et al. may be viewed as corresponding to the location information in the present invention. However, the EPG of Alexander et al. does not correspond to the tag information of the present invention because the EPG is distributed independently of a program content (video content) and does not directly correspond to the program content. In other words, the program content of Alexander et al. is not produced based on the EPG. Furthermore, the content of the EPG is determined by a scheduled broadcasting station and a scheduled broadcasting time for the program content. Therefore, there is only an indirect relationship between the EPG and the program content.

In contrast to Alexander et al., the tag information of the present invention, as recited in claims 46 and 63, is determined by a program content and an intention of a producer, and therefore, there is a close relationship between the tag information and the program content.

The following two problems which cannot be solved by Alexander et al. are solved by the claimed invention.

1) An advertisement not corresponding to a program content is outputted when there is a sudden change in the program content. In the present invention, tag information is contained in a program content (video content), and therefore, even if there is a sudden change in the program content, tag information corresponding to the changed program can be obtained.

2) An advertisement cannot be inserted to a program content to be viewed, when a reception terminal adopting the method of Alexander et al. has not obtained the EPG. In the present invention, tag information is contained in a program content, and therefore, the tag information alone cannot be obtained just like the program content alone cannot be obtained.

Another significant difference between the claimed invention and Alexander et al. is that, in Alexander et al., the internet/WWW connection is established by using the EPG, whereas the terminal of the claimed invention does not use the EPG.

Furthermore, Alexander et al. does not disclose or suggest the URL specifying unit and the fetch unit of new claim 46 and the terminal of new claim 63.

Rangan et al. discloses a reception terminal for displaying a first data stream synchronized with a second data stream embedded therein by using vertical blanking intervals (VBI). Rangan et al. also discloses applying the reception terminal to WEBTV.

Rangan et al. indicates that a URL is embedded, as the second data stream, in the first data stream. However, the URL neither corresponds to a program content nor contains information concerning a location of the reception terminal.

Furthermore, Rangan et al. does not disclose or suggest a terminal comprising elements such as a URL specifying unit which is operable to specify the URL of a commercial message corresponding to a location of the terminal, and a fetch unit which is operable to fetch the commercial message by using the specified URL.

Accordingly, in Rangan et al., the URL to be embedded in the first data stream does not correspond to the first data stream and the location of reception terminal. Therefore, the reception terminal of Rangan et al. can neither specify the URL corresponding to the location of the reception terminal nor fetch the specified commercial message. Accordingly, the reception terminal of Rangan et al. clearly does not have the features of the claimed invention, namely, outputting a commercial message corresponding to a video content and a location of the terminal.

For the above reasons, Alexander et al. and Rangan et al. do not individually disclose or suggest each and every limitation of new claims 46 and 63. Furthermore, the combination of Rangan et al. and Alexander et al. (hereinafter referred to as the “combination apparatus”) also do not disclose or suggest the inventions of new claims 46 and 63.

The combination apparatus results in EPG data, i.e., a second data stream, being embedded in a program content, i.e., a first data stream, and the combination apparatus (reception terminal) obtaining a category label based on time information (real time clock) or a tuner setting, and obtaining an advertisement corresponding to the program content for display by using the obtained category label. In this case, the first data stream can be viewed as corresponding to the video content of the present invention, and the second data stream can be viewed as corresponding to the tag information of the present invention. In terms of configuration, the first data stream embedded with the EPG data can be viewed as corresponding to the video content embedded with the tag information of the present invention.

However, the EPG data of the combination apparatus is information pertaining to programs coming from all broadcasting stations, and there is no direct correspondence between the EPG data and the program content.

On the other hand, the video content and the tag information of the claimed invention have a direct correspondence therebetween. Accordingly, even if the combination apparatus extracts EPG data from the first data stream, the extracted data does not indicate information for specifying a URL of a commercial message corresponding to the first stream and the location of the reception terminal.

Furthermore, the combination apparatus does not include a URL specifying unit which is operable to specify, by using location information indicating an area where the reception terminal is located as well as tag information, a URL indicating a location of a commercial message corresponding to a location of the reception terminal, as recited in new claim 46. In addition, the combination apparatus does not include a fetch unit which is operable to fetch the content message based on the specified URL, as recited in new claim 46.

Similarly, the combination apparatus is not a terminal for specifying the plurality of commercial messages each being assigned a respective URL, establishing a correspondence between the video content and the plurality of commercial messages, and outputting the video content containing the tag information corresponding to the video content and the plurality of commercial messages corresponding to the video content, as recited in new claim 63. Moreover, the combination apparatus does not have the commercial message specifying information of the claimed invention.

Consequently, the combination apparatus cannot specify, based on a received first data stream and a second data stream, a URL of a commercial message corresponding to a location of the reception terminal, and therefore, cannot obtain the commercial message.

Accordingly, Rangan et al. and Alexander et al. clearly fail to disclose or suggest each and every limitation of new claims 46 and 63. Furthermore, in view of the above, one skilled in the art would not arrive at the present invention by combining and substantially modifying the disclosures of Rangan et al. and Alexander et al.

Therefore, for at least the foregoing reasons, new claims 46 and 63 are clearly patentable over Rangan et al. and Alexander et al.

In item 3 on page 16 of the Office Action, claims 35 and 45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rangan et al. in view of Alexander et al. and further in view of Hidary et al. (U.S. 5,774,664). In item 4 on page 19 of the Office Action, claim 38 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Rangan et al. in view of

Alexander et al. and Hidary et al. and further in view of Saito (U.S. 5,901,339). Further, in item 5 on page 22 of the Office Action, claims 5-6, 10, 20, 24-25 and 29 were rejected under 103(a) as being unpatentable over Rangan et al. in view of Alexander et al. and Saito and further in view of Kato et al. (U.S. 6,301,663). Lastly, in item 6 on page 24 of the Office Action, claims 39 and 43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rangan et al. in view of Alexander, Hidary et al. and Saito and further in view of Kato et al.

As demonstrated above, Rangan et al. and Alexander et al. clearly fail to disclose or suggest each and every limitation of new claims 46 and 63. Hidary et al., Sato and Kato et al., either individually or in combination, fail to disclose or suggest the URL specifying unit and the fetch unit of new claim 46, and the terminal of new claim 63. Therefore, Hidary et al., Sato and Kato et al. fail to cure the deficiencies of Rangan et al. and Alexander et al. for failing to disclose or suggest each and every limitation of new claims 46 and 63.

Accordingly, no obvious combination of Rangan et al., Alexander et al., Hidary et al., Sato and Kato et al. would result in the inventions of new claims 46 and 63 since Rangan et al., Alexander et al., Hidary et al., Sato and Kato et al., either individually or in combination, clearly fail to disclose or suggest each and every limitation of new claims 46 and 63.

Furthermore, it is submitted that the distinctions discussed above are such that a person having ordinary skill in the art at the time the invention was made would not have been motivated to modify Rangan et al., Alexander et al., Hidary et al., Sato and Kato et al. in such as manner as to result in, or otherwise render obvious, the present invention as recited in new claims 46 and 63.

Therefore, it is submitted that the new claims 46 and 63, as well as new claims 47-62 and 64-71 which depend therefrom, are clearly allowable over the prior art as applied by the Examiner.

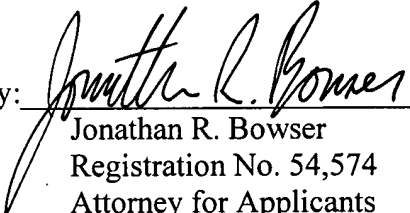
In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

A fee and a Petition for a one-month Extension of Time are filed herewith pursuant to 37 CFR § 1.136(a).

Respectfully submitted,

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